§ 169.553

subpart 160.171 or a Type V exposure PFD approved under subpart 160.053.

[CGD 83-005, 51 FR 896, Jan. 9, 1986, as amended by CGD 95-072, 60 FR 50468, Sept. 29, 1995]

§169.553 Pyrotechnic distress signals.

- (a) All pyrotechnic distress signals must be of an approved type.
- (b) Replacement must be made no later than the first inspection for certification or reinspection after the date of expiration.
- (c) Except as otherwise provided in this section, each vessel must carry the following pyrotechnic distress signals:
- (1) 6 hand red flare distress signals, and 6 hand orange smoke distress signals: or.
- (2) 12 hand held rocket propelled parachute red flare distress signals.
 - (d) [Reserved]
- (e) All pyrotechnic distress signals must be carried near the helm or in a location considered suitable by the Officer in Charge, Marine Inspection.
- (f) All pyrotechnic distress signals must be stowed in a portable watertight container.

§169.555 Emergency position indicating radio beacon (EPIRB).

- (a) Each vessel certificated for exposed waters must have an approved Class A emergency position indicating radiobeacon (EPIRB), and each vessel certificated for partially protected waters must have an approved Class C emergency position indicating radiobeacon (EPIRB). The required EPIRB must be-
 - (1) Operational:
- (2) Stowed where it is readily accessible for testing and use; and
- (3) Stowed in a manner so that it will float free if the vessel sinks.
- (b) Each vessel must have an additional Class B EPIRB for every twentyfive persons onboard, for use in the lifeboats and liferafts.

[CGD 83-005, 51 FR 896, Jan. 9, 1986; 51 FR 10632, Mar. 28, 1986]

§169.556 Work vests.

(a) Buoyant work vests carried under the permissive authority of this section must be approved under subpart 160.053 of this chapter.

- (b) Approved buoyant work vests are items of safety apparel and may be carried aboard vessels to be worn by persons when working near or over the water under favorable working conditions. Work vests are not accepted in lieu of any of the required number of approved personal flotation devices and must not be worn during drills and emergencies.
- (c) The approved buoyant work vests must be stowed separately from personal flotation devices, and in locations where they will not be confused with personal flotation devices.
- (d) Each work vest is subject to examination by a marine inspector to determine its serviceability. If a work vest is found not to be in a serviceable condition, then it must be repaired or removed from the vessel. If a work vest is beyond repair, it must be destroyed in the presence of the marine inspec-

FIREFIGHTING EQUIPMENT

§169.559 Fire pumps.

(a) Each sailing school vessel must be equipped with fire pumps as required in Table 169.559(a).

TABLE 169.559(A)—FIRE PUMPS

Length	Exposed and partially protected water serv- ice	Protected water serv- ice
65 feet but less than 90 feet	¹ 1	0
90 feet but less than 120 feet	² 1	11
120 feet or greater	³ 2	11

¹ May be driven off a propulsion engine and may be used

(b) Fire pump capacity must be in accordance with the following:

Vessel length	Minimum capacity	
Less than 90 ft	5.5 m ³ /hr (25 gpm).	
90 feet but less than 120 ft	11.0 m ³ /hr (50 gpm).	
Greater than 120 ft	14.3 m ³ /hr (66.6 gpm).	

- (c) Each fire pump must be fitted with a pressure gage on the discharge side of the pump.
- (d) Each vessel must have a hand operated portable fire pump having a capacity of at least 1.1 m³/hr (5 gpm).

¹ May be driven off a propulsion engine and may be used as a bilge pump.

² Must be driven by a source of power independent of the propulsion engine and may be used as a bilge pump.

³ One pump may be driven off a propulsion unit and one pump may be used as a bilge pump. Pumps must be located in separate spaces.

This pump must be equipped with suction and discharge hose suitable for use in firefighting.

§169.561 Firemain.

- (a) Each vessel required to be provided with a power-driven fire pump must also be provided with a fire main, hydrants, hoses and nozzles.
- (b) Fire hydrants must be of sufficient number and located so that any part of the vessel may be reached with an effective stream of water from a single length of hose.
- (c) All piping, valves, and fittings must be in accordance with good marine practice and suitable for the purpose intended.

§169.563 Firehose.

- (a) One length of firehose must be provided for each fire hydrant required.
- (b) Vessels less than 90 feet in length must have commercial firehose or equivalent of not over 1½ inch diameter or garden hose of not less than 5% inch nominal inside diameter. If garden hose is used, it must be of a good commercial grade constructed of an inner rubber tube, plies of braided cotton reinforcement and an outer rubber cover, or of equivalent material, and must be fitted with a commercial garden hose nozzle of good grade bronze or equivalent metal.
- (c) Vessels of 90 feet or greater must have lined commercial firehose that conform to Underwriters' Laboratories, Inc. Standard 19 or Federal Specification ZZ-H-451. The firehose must be fitted with a combination nozzle approved under § 162.027 of this chapter.
- (d) Each length of firehose must be a single piece 50 feet long.
- (e) Firehose must be connected to the hydrants at all times, except that, on open decks where no protection is afforded to the hose, it may be temporarily removed from the hydrant in heavy weather and stowed in an accessible nearby location.

§169.564 Fixed extinguishing system, general.

(a) Fixed carbon dioxide or halogenated extinguishing systems must be installed to protect the following spaces—

- (1) The machinery and fuel tank spaces of all vessels, except where machinery and fuel tank spaces are so open to the atmosphere as to make the use of a fixed system ineffective;
- (2) The paint and oil rooms and similar hazardous spaces; and
- (3) The galley stove area, for vessels greater than 90 feet in length and certificated for exposed or partially protected water service.
- (b) Each fixed extinguishing system must be of an approved carbon dioxide or halogenated type and installed to the satisfaction of the Officer in Charge, Marine Inspection.

§169.565 Fixed carbon dioxide system.

(a) The number of pounds of carbon dioxide required for each space protected must be equal to the gross volume of the space divided by the appropriate factor in Table 169.565(a).

TABLE 169.565(A)

Gross volume of compartment, cubic feet		Factor
Over—	Not over—	Factor
0	500 1,600 4,500	15 16 18 20

- (b) A separate supply of carbon dioxide is not required for each space protected. The total available supply must be sufficient for the space requiring the greatest amount.
- (c) *Controls.* (1) Each control and valve for the operation of the system must be outside the spaces protected and accessible at all times.
- (2) Each branch line must be fitted with an approved shutoff valve. Each valve must be kept closed at all times except to operate the particular system.
- (3) The arrangements must be such that the entire charge to any space can be introduced into the space by the operation of one valve selecting the space, and one control for releasing the required amount of fire extinguishing agent. The release control must be of an approved type and located adjacent to the branch line shutoff valve.
- (4) Complete but simple instructions for the operation of the system must be located in a conspicuous place at or near the releasing control device.